

Practice B

For use with pages 75–81

Find the slope of the line passing through the given points.

1. $(4, 5), (2, 9)$ 2. $(1, 4), (5, 0)$ 3. $(-3, 5), (6, 2)$
 4. $(2, -7), (4, -4)$ 5. $(0, -8), (-3, -5)$ 6. $\left(\frac{1}{2}, \frac{3}{4}\right), \left(\frac{3}{2}, \frac{9}{4}\right)$

Tell which line is steeper.

7. Line 1: through $(-2, 1)$ and $(3, 6)$
 Line 2: through $(4, 5)$ and $(2, -3)$
 8. Line 1: through $(3, -1)$ and $(5, -5)$
 Line 2: through $(-2, -2)$ and $(1, -11)$
 9. Line 1: through $(0, 3)$ and $(-2, 4)$
 Line 2: through $(-8, 6)$ and $(4, -6)$
 10. Line 1: through $(10, 2)$ and $(-5, -3)$
 Line 2: through $(4, -1)$ and $(12, 0)$

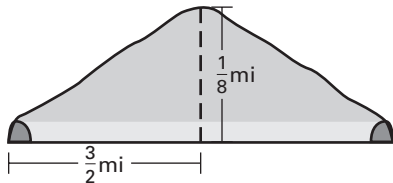
Find the slope of the line passing through the given points. Then tell whether the line *rises, falls, is horizontal, or is vertical*.

11. $(4, -2)$ and $(3, -3)$ 12. $(9, -2)$ and $(-3, -2)$ 13. $(-3, 5)$ and $(5, 3)$
 14. $(7, 5)$ and $(7, -8)$ 15. $(10, 5)$ and $(4, 15)$ 16. $(0, 4)$ and $(-3, 4)$

Tell whether the lines are *parallel, perpendicular, or neither*.

17. Line 1: through $(3, 2)$ and $(1, 5)$
 Line 2: through $(-1, 6)$ and $(2, 8)$
 18. Line 1: through $(-3, -1)$ and $(4, -8)$
 Line 2: through $(5, 3)$ and $(4, 2)$
 19. Line 1: through $(-2, 1)$ and $(-5, 3)$
 Line 2: through $(0, 3)$ and $(3, 5)$
 20. Line 1: through $(0, 6)$ and $(-5, 0)$
 Line 2: through $(-4, 4)$ and $(2, -1)$

21. **Mountainside** The halfway point of a tunnel through a mountain is $\frac{3}{2}$ miles from either end of the tunnel. The mountain is 660 feet $\left(\frac{1}{8}$ mile) high. Find the slope of the side of the mountain.



22. **Prom Tickets** You volunteered to take a shift selling prom tickets during your morning study hall. When your shift began at 11:00 A.M., 50 tickets had been sold. At 11:40 A.M., when your shift ended, 84 tickets had been sold. At what rate did you sell prom tickets?